REMARKS/ARGUMENTS

Claim Status and Amendment to the Claims

Claims 1-4, 15-20, 27-32, 36, and 38-46 are now pending.

Claims 5-14, 21-26, 33-35, and 37 had been canceled, without prejudice, and withdrawn from consideration as the result of an earlier restriction requirement.

No claims stand allowed.

Claims 1, 3, 15, 18, 27, 30, and 36 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. The text of claims 2, 4, 16-17, 19-20, 28-29, and 31-32 is unchanged, but their meaning is changed because they depend from amended claims. The amendment also contains minor changes of a clerical nature. New claims 38-46 have been added by this amendment and also particularly point out and distinctly claim subject matter regarded as the invention. No "new matter" has been added by the amendment.

The 35 U.S.C. §103 Rejection

Claims 1-4, 15-20, 27-32 and 36 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Lecheler et al. (U.S. Pat. No. 6,425,008) in view of Kanai (U.S. Pat. No. 5,912,891) over the admitted prior art, among which claims 1, 15, 27, and 36 are independent claims. This rejection is respectfully traversed.

According to M.P.E.P. §2143,

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or

references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

In addition, to reach a proper determination under 35 U.S.C. 103, the claimed invention "as a whole" must be evaluated, and knowledge of applicant's disclosure must be put aside in reaching this determination. Impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art. M.P.E.P. §2142

Claim 1 defines a method for assigning private Internet Protocol ("IP") addresses to network devices in a cluster, each of the network devices being capable of interconnecting at least two network segments and forwarding data frames from one network segment to another. The claimed method comprises (a) reading the Media Access Control ("MAC") address of a first network device, (b) generating a private IP address as a function of said MAC address, (c) assigning said private IP address to said first network device, and (d) communicating with said first network device using said private IP address, as recited in claim 1 as amended.

Lecheler allegedly discloses the use of duplicated private IP addresses in different private networks such as customer A network **16** and customer C network **20** (column 1, lines 43-49 and FIG. 1 thereof). However, as the Examiner correctly mentions, Lecheler fails to teach or suggest how such a private IP address is generated or assigned to network devices. Lecheler also fails to teach or suggest any use of MAC addresses to generate private IP addresses, or more specifically, generating a private IP address as a function of the MAC address of the network device, as recited in claim 1.

However, the Examiner maintains that Kanai discloses the claimed features missing from Lecheler. The Examiner specifically alleges, in the Office Action, as follows:

"Because the added portion is common among the IP address and the MAC address, the IP address is a function of the MAC address. Otherwise, the IP address will not be a function of the MAC address."

The Applicant respectfully disagrees. First, it should be noted that the claimed invention does NOT claim "a private IP address having a common portion with the MAC address." The claimed invention clearly recites "calculating a private IP address *as a function of* said MAC address" (*emphasis* added). As is well known to one of ordinary skill in the art, if y is a function of x, i.e., $y = f(x)$ (if mathematically expressed), y cannot be determined or obtained unless and until x is first given. If the value of y CAN be determined or obtained before x is given or without knowing the value of x, y cannot logically be a function of x. Here, y is a private IP address and x is a MAC address. True, FIG. 17 of the present specification illustrates, without limitation, one embodiment

of the present invention in which part of the MAC address is used to generate a private IP address, and thus the private IP address *may* have a common part of the MAC address. However, this is not a "vice versa." Merely having the common part with a MAC address does not make the private IP address a function of the MAC address. As recited in claim 1, the private IP address of the claimed invention is generated as function of the MAC address and thus obtained only when and after the MAC address is given. Thus, the claimed invention recites "reading the MAC address of a first network device," and "generate a private IP address as a function of said MAC address," which was read from the first network device. Reading the MAC address and generating a private IP address as a function of the MAC address are the limitations having functional/structural relationships and thus must be evaluated as a whole.

On the other hand, in Kanai, the alleged private IP address is created by adding the common part (e.g., 110.2) to the base part "IP" as the Examiner alleges. The common part identifies the LAN **110** ("110" portion) and the emulation client **112** ("2" portion), which is predefined regardless of any of the base addresses ("IP", "ATM" or "MAC"). Thus, in Kanai, once the LAN and the emulation client are given, the alleged private IP address is obtained without any knowledge of the MAC address. This teaches away from reading the MAC address of the network device to generate a private IP address. Actually, Kanai's MAC address is also generated in the same manner as the alleged private IP address from the LAN/client identifier, i.e., adding the common part "110.2" to the base part "MAC," and thus the MAC address of the network device does not exist until the common part has been added.

Accordingly, Kanai fails to teach or suggest reading the MAC address of a first network device, and generating a private IP address as a function of said MAC address, as recited in claim 1. Thus, Lecheler, whether considered alone or combined with or modified by Kanai, does not teach the claimed invention. It is respectfully requested that the rejection of claims based on Lecheler and Kanai be withdrawn.

Claims 15, 27, and 36 also include substantially the same distinctive features as claim 1. In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Dependent Claims

Claims 2-4 depend from claim 1, claims 16-20 depend from claim 15, and claims 28-32 depend from claim 27, and thus include the limitations of respective independent claims. The argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable at least for the same reasons.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Request for Allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-1698.

Respectfully submitted,
THELEN REID & PRIEST, LLP

Dated: April 2, 2004

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Limited Recognition under 37 CFR §10.9(b)

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Expires: August 27, 2004

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